

## **1. Rejection of Claims 1-3 Under 35 USC §102(b)**

The aforementioned Office Action of August 25, 2006 again rejected claims 1-3 of the subject application under 35 USC §102(b) as being anticipated by Strumbos (US Patent No. 3,605,672). The Examiner used exactly the same rationale for this rejection as was used in the previous Office Action dated March 9, 2006. The applicant respectfully disagrees with this contention of anticipation for the following reasons.

Reiterating what was previously stated in the applicant's Office Action response dated June 9, 2006, the **applicant claims that the radius of the inner tubular cylinder of the nozzle regulator automatically decreases when a fluid within the cylinder experiences a backpressure, and when the backpressure is removed the radius automatically increases back to its original size.** It is important to note that the applicant's claimed nozzle regulator operates in a completely self-contained manner, automatically adjusting the radius of its inner cylinder based *only* on the backpressure of the fluid flowing within the cylinder without requiring any sort of interconnection to, or operation with, an auxiliary controller or other apparatus external to the nozzle regulator. This is advantageous since it results in a nozzle regulator whose design and construction is much simpler, and hence much lower cost and much higher reliability, than one which requires an external auxiliary controller.

In contrast, **Strumbos** teaches a directional control apparatus containing inflatable elastic sector members which are attached to the inside surface of a rigid outer shroud. Strumbos further **teaches that the only way the sector members are inflated and deflated is under the control of a "fluid circuit" which is external to the rigid shroud and inflatable sector members.** More particularly, Strumbos teaches that **"a steering force is provided selectively by the [directional control apparatus] by means of a controlled inflation and deflation of the sector members."** (emphasis added) Strumbos yet further teaches: "Any suitable means for accomplishing this controlled inflation and deflation may be employed: a suitable fluid circuit for the purpose is illustrated in FIG. 2. As shown, each sector member 16 through 19 is connected by means of fluid passages 34 to supply conduits 35, 36, 37 and 38 which lead through distributing valve 39 to a suitable

supply 40 of pressurized fluid ... distributing valve 39 can be in operational connection with the helmsman's steering control ... or the valve can be integrated into the craft's autopilot or automatic steering system ..." (refer to column 5, lines 49-58 – emphasis added). Thus, Strumbos teaches that there are multiple sources of the pressurized fluid, **each source of pressurized fluid (a) is independently controlled by an external circuit, (b) is independently connected to a different sector member in order to selectively inflate or deflate the sector member, and (c) flows only into and out of the particular sector member it is connected to**, hence altering the steering force and related directional control of the apparatus. In contrast to the applicant's claimed nozzle regulator summarized above, **the pressurized fluid taught in Strumbos does not flow within the inner tubular cylinder created by the inflatable sector members. Nowhere does Strumbos teach that changes in the backpressure in the fluid that does flow inside said inner cylinder results in automatic changes in the radius of the cylinder** as is claimed by the applicant.

Regarding Strumbos' aforementioned teaching that the distributing valve "can be integrated into the craft's autopilot or automatic steering system," for the various reasons just presented, the applicant respectfully disagrees with the Examiner's assertion that this teaching anticipates the applicant's aforementioned claimed nozzle regulator in which the radius of the inner tubular cylinder *automatically* decreases when a fluid within the cylinder experiences a backpressure, and when the backpressure is removed the radius *automatically* increases back to its original size.

A prima facie case of anticipation is established only when the Examiner can show that the cited references teach *each* of the claimed elements of a rejected claim. In this case, based on the remarks presented above, the Examiner has not shown that the Strumbos reference teaches the subject application's claimed feature of a nozzle regulator which includes an inner tubular cylinder whose radius automatically decreases when a fluid inside the cylinder experiences a backpressure, and automatically increases back to its original size when the backpressure is removed. Thus, the rejected claims recite a feature that is not taught in the cited art, and as such, a prima facie case of anticipation can not be established. Accordingly, it is respectfully requested that the rejection of claims 1-3 be

reconsidered based on the following novel language in claim 1:

"an inner tubular cylinder having a second radius that is less than the first radius, wherein the outer tubular cylinder and the inner tubular cylinder are concentric about a longitudinal direction, and wherein the inner tubular cylinder is made of a deformable material such that when a fluid within the inner tubular cylinder experiences a backpressure, the second radius automatically decreases, but when the backpressure is removed the second radius automatically increases back to its original dimension;"

### 1.1 Claim 3

With further regard to dependent claim 3, MPEP (Eighth Edition, Latest Revision October 2005) §706.07, subsection entitled "STATEMENT OF GROUNDS," second paragraph states: "... the final rejection ... should include a rebuttal of any arguments raised in the applicant's reply." MPEP §707.07(f), third paragraph further states: "Where the applicant traverses any rejection, the examiner should, if he or she repeats the rejection, take note of the applicant's argument and answer the substance of it." Finally, MPEP §707.07(f), subsection entitled "¶ 7.37 Arguments Are Not Persuasive," Examiner Note 1 states: "The examiner must address all arguments which have not already been responded to in the statement of the rejection." In this case, the **Examiner never responded to the remarks the applicant made specifically regarding claim 3** in the applicant's previous Office Action response dated June 9, 2006. For this reason, the **applicant respectfully requests that the Examiner rescind the finality of the aforementioned Office Action** of August 25, 2006.

Reiterating what was previously stated in the applicant's Office Action response dated June 9, 2006, in claim 3 the **applicant further claims that the *entire* nozzle regulator is constructed of a deformable material**. In contrast, as discussed above, **Strumbos teaches** a directional control apparatus which contains inflatable elastic sector members that are attached to the inside surface of a ***rigid* outer shroud**. Strumbos does not teach that the *entire* apparatus (i.e., *both* the sector members and the outer shroud) is constructed of a deformable material. Therefore, claim 3 also recites a feature that is not taught in the cited art, and as such, a prima facie case of anticipation can not be

established. Accordingly, it is respectfully requested that the rejection of claim 3 be further reconsidered based on its following novel claim language:

"The nozzle regulator as set forth in claim 1, wherein **the entire nozzle regulator is constructed of the deformable material.**"

## **2. Rejection of Claims 5-7 Under 35 USC §103(a)**

The aforementioned Office Action of August 25, 2006 again rejected claims 5-7 of the subject application under 35 USC §103(a) as being obvious over Strumbos. The Examiner used exactly the same rationale for this rejection as was used in the previous Office Action dated March 9, 2006. The applicant respectfully disagrees with this contention of obviousness for the following reasons.

As discussed in section 1 above, **the applicant claims that the radius of the inner tubular cylinder of the nozzle regulator automatically decreases when a fluid within the cylinder experiences a backpressure, and when the backpressure is removed the radius automatically increases back to its original size.**

In contrast, as also discussed in section 1 above, **Strumbos teaches** a directional control apparatus containing inflatable sector members which are attached to the inside surface of a rigid outer shroud. Strumbos further teaches that **the only way the sector members are inflated and deflated is under the control of an external fluid circuit** which is in operational connection with a steering control system. Together, the fluid circuit and steering control system **selectively control the inflation and deflation of each sector member by independently controlling the flow of individual sources of pressurized fluid into and out of each sector member** to inflate or deflate it accordingly to provide the desired steering force. It is important to note that **each source of pressurized fluid flows only into and out of the particular sector member it is connected to, not within the inner cylinder** created by the inflatable sector members. **Nowhere does Strumbos teach that changes in the backpressure in the fluid that does flow inside said inner cylinder results in automatic changes in the radius of the cylinder** as is claimed by the applicant. Incorporating the well known prior art of Kort

Nozzles does not change or add anything to these teachings of Strumbos.

In order to deem the applicant's claims unpatentable under 35 USC §103(a), a prima facie case showing obviousness must be made. To make a prima facie case showing obviousness, *all* of the elements of the recited claims must be considered, especially when they are missing from the prior art. If a claimed element is *not* taught in the prior art and has advantages not appreciated by the prior art, then no prima facie case of obviousness exists. The Federal Circuit court has stated that it was an error not to distinguish claims over a combination of prior art references where a material limitation in the claimed system and its purpose was not taught therein (*In Re Fine*, 837 F.2d 107, 5 USPQ2d 1596 (Fed. Cir. 1988)).

In this case, based on the remarks presented above, Strumbos in view of Kort Nozzles does not teach the subject application's claimed feature of a nozzle regulator which includes an inner tubular cylinder whose radius automatically decreases when a fluid inside the cylinder experiences a backpressure, and automatically increases back to its original size when the backpressure is removed. Furthermore, Strumbos in view of Kort Nozzles does not appreciate the advantages of this feature which are discussed in section 1 above. Accordingly, no prima facie case of obviousness has been established in accordance with the holding of *In Re Fine*. This lack of prima facie showing of obviousness means that rejected claims 5-7 are patentable under 35 USC §103(a) over Strumbos in view of Kort Nozzles. Accordingly, it is respectfully requested that these claims be reconsidered based on the non-obvious claim language in claim 1, which is recited in section 1 above.

### **3. Rejection of Claims 9 & 14 Under 35 USC §103(a)**

The aforementioned Office Action of August 25, 2006 again rejected claims 9 and 14 of the subject application under 35 USC §103(a) as being obvious over Strumbos. The Examiner used exactly the same rationale for this rejection as was used in the previous Office Action dated March 9, 2006. The applicant respectfully disagrees with this contention of obviousness for the following reasons.

Reiterating what was previously stated in the applicant's Office Action response dated June 9, 2006, the applicant claims an **automatically deformable nozzle regulator which is constructed of a deformable material**. In other words, the *entire* nozzle regulator is constructed of a deformable material, including *both* the outer and inner cylinders.

In contrast, as discussed in sections 1 and 2 above, **Strumbos teaches a directional control apparatus containing inflatable sector members which are attached to the inside surface of a rigid outer shroud**. Strumbos further teaches that **the only way the sector members are inflated and deflated is under the control of an external fluid circuit** which is in operational connection with a steering control system. Together, the fluid circuit and steering control system **selectively control the inflation and deflation of each sector member by independently controlling the flow of individual sources of pressurized fluid into and out of each sector member** to inflate or deflate it accordingly to provide the desired steering force. **Nowhere does Strumbos teach that the apparatus is automatically deformable or that it is entirely constructed of a deformable material** as is claimed by the applicant. Incorporating the well known prior art of Kort Nozzles does not change or add anything to these teachings of Strumbos.

Thus, Strumbos in view of Kort Nozzles does not teach the subject application's claimed features of a nozzle regulator which is automatically deformable and which is constructed of a deformable material. Furthermore, Strumbos in view of Kort Nozzles does not appreciate the advantages of these features which are discussed in section 1 above. Accordingly, no prima facie case of obviousness has been established in accordance with the holding of *In Re Fine*. This lack of prima facie showing of obviousness means that rejected claims 9 and 14 are patentable under 35 USC §103(a) over Strumbos in view of Kort Nozzles. Accordingly, it is respectfully requested that these claims be reconsidered based on the following non-obvious language in claim 9:

"An automatically deformable nozzle regulator, comprising:  
wherein the automatically deformable nozzle regulator is constructed of a deformable material."

#### **4. Rejection of Claim 20 Under 35 USC §103(a)**

The aforementioned Office Action of August 25, 2006 again rejected claim 20 of the subject application under 35 USC §103(a) as being obvious over the combination of Strumbos and Bernoulli's principle. The Examiner used exactly the same rationale for this rejection as was used in the previous Office Action dated March 9, 2006. The applicant respectfully disagrees with this contention of obviousness for the following reasons.

Reiterating what was previously stated in the applicant's Office Action response dated June 9, 2006, the **applicant claims** a method for *automatically* adjusting the output area of a deformable nozzle regulator in which a **backpressure in the fluid that flows from the inlet side to the outlet side of the regulator causes** an output nozzle on the regulator to automatically constrict, resulting in **an automatic reduction in the output area of the nozzle**. The applicant further claims that a **subsequent decrease in the backpressure allows the output area of the nozzle to automatically return to its original size**.

In contrast, as discussed in sections 1 and 2 above, **Strumbos teaches** a directional control apparatus containing inflatable sector members which are attached to the inside surface of a rigid outer shroud. Strumbos further teaches that **the *only way the sector members are inflated and deflated is under the control of an external fluid circuit* which is in operational connection with a steering control system**. Together, the fluid circuit and steering control system **selectively control the inflation and deflation of each sector member by independently controlling the flow of individual sources of pressurized fluid into and out of each sector member to inflate or deflate it accordingly to provide the desired steering force**. It is important to note that **each source of pressurized fluid flows *only* into and out of the particular sector member it is connected to, *not* within the inner cylinder created by the inflatable sector members**. **Nowhere does Strumbos teach that the inflation and deflation of each sector member, and hence the effective output area of the apparatus, is *automatically* adjusted based on the level of backpressure in the fluid that flows from the inlet side**

**to the outlet side of the apparatus** as is claimed by the applicant. Bernoulli's principle also does not teach this. Nowhere does Strumbos teach the effect of backpressure in the fluid that flows from the inlet to the outlet side of the apparatus on the effective output area of the apparatus. In fact, the term "backpressure" is not used anywhere in Strumbos.

Thus, neither Strumbos, nor Bernoulli's principle, nor the combination of Strumbos and Bernoulli's principle teaches the subject application's claimed feature of automatically adjusting the output area of a deformable nozzle regulator, where a backpressure in the fluid that flows from the inlet side to the outlet side of the regulator causes an output nozzle on the regulator to automatically constrict resulting in an automatic reduction in the output area of the nozzle, and where a subsequent decrease in the backpressure allows the output area of the nozzle to automatically return to its original size. Furthermore, neither Strumbos, nor Bernoulli's principle, nor the combination of Strumbos and Bernoulli's principle appreciates the advantages of this feature which are discussed in section 1 above. Accordingly, no prima facie case of obviousness has been established in accordance with the holding of *In Re Fine*. This lack of prima facie showing of obviousness means that rejected claim 20 is patentable under 35 USC §103(a) over the combination of Strumbos and Bernoulli's principle. Accordingly, it is respectfully requested that this claim be reconsidered based on its following non-obvious claim language:

"A method for automatically adjusting an output area of a deformable nozzle regulator having an inlet side and an outlet side such that fluid flows through the deformable nozzle regulator from the inlet side to the outlet side and exits at an output nozzle, comprising:  
generating a backpressure of the fluid at the deformable nozzle regulator;  
constricting the output nozzle using the backpressure to reduce an output area of the output nozzle; and  
decreasing the backpressure to allow the output area to return to its original size."

Additionally, reiterating what was previously stated in the applicant's Office Action response dated June 9, 2006, the aforementioned controlled inflation feature of Strumbos is of notable significance in that, in general, Strumbos' teachings, stated principal objects and applications include improvements to the *steering of a vehicle* in a fluid medium such as a boat/ship in water. (refer, for example, to column 1, lines 40-42



and column 2, line 40 – column 3, line 54) All of the objects and applications taught by Strumbos fundamentally require that the directional control apparatus is coupled to, and operates under the control of, an auxiliary steering control mechanism contained within the vehicle whose direction is being controlled. MPEP (Eighth Edition, Latest Revision October 2005) §2143.01, Part V states: "If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984)" The applicant asserts that **combining Strumbos and Bernoulli's principle** in the manner suggested by the Examiner, in order to automatically regulate the fluid flowing through the inner cylinder of the apparatus by using the backpressure generated by the fluid, **would destroy Strumbos' intended functionality and violate Strumbos' principal objects and applications by interfering with the controls coming from the steering mechanism in the vehicle.** Hence, Strumbos would be rendered unsatisfactory for its intended purpose as a directional control apparatus.

#### **5. Rejection of Claim 15 Under 35 USC §103(a)**

The aforementioned Office Action of August 25, 2006 again rejected claim 15 of the subject application under 35 USC §103(a) as being unpatentable over Tash et al. (US Patent No. 4,963,073) in view of Strumbos. The Examiner used exactly the same rationale for this rejection as was used in the previous Office Action dated March 9, 2006. For the following reasons, the applicant respectfully asserts that this claim is patentable as it is not obvious over Tash et al. in view of Strumbos.

Reiterating what was previously stated in the applicant's Office Action response dated June 9, 2006, the **applicant claims** an outlet side regulated venturi pump which includes, at its outlet side, **an automatically deformable nozzle regulator that automatically adjusts its output area** to further decrease the pressure inside the pump.

In contrast, Tash et al. teaches a pump which uses water pressure supplied from a garden hose in order to power the pump. Tash et al. further teaches that the entire pump

is *rigidly* constructed (refer to column 2, lines 37-39 which state that "the pump itself is molded of high impact plastic or a like material"). **No part of the pump taught by Tash et al. is deformable.** Furthermore, **nowhere does Tash et al. teach that the pump includes an automatically deformable nozzle regulator that automatically adjusts its output area** to further decrease the pressure inside the pump. As discussed in sections 1 and 4 above, **Strumbos also does not teach an automatically deformable nozzle regulator that automatically adjusts its output area** to further decrease the pressure inside the pump.

Thus, neither Tash et al., nor Strumbos, nor the combination of Tash et al. and Strumbos teaches the subject application's claimed feature of an outlet side regulated venturi pump which includes, at its outlet side, an automatically deformable nozzle regulator that automatically adjusts its output area to further decrease the pressure inside the pump. Furthermore, neither Tash et al., nor Strumbos, nor the combination of Tash et al. and Strumbos appreciates the advantages of this feature which are discussed in section 1 above. Accordingly, no prima facie case of obviousness has been established in accordance with the holding of *In Re Fine*. This lack of prima facie showing of obviousness means that rejected claim 15 is patentable under 35 USC §103(a) over Tash et al. in view of Strumbos. Accordingly, it is respectfully requested that this claim be reconsidered based on its following non-obvious claim language:

"an automatically deformable nozzle regulator in fluid communication with the venturi throat and cavity that automatically adjusts its output area to further decrease the pressure in the cavity."

## **6. Rejection of Claims 1-20 Under 35 USC §103(a)**

The aforementioned Office Action of August 25, 2006 again further rejected claims 1-20 of the subject application under 35 USC §103(a) as being obvious over Popov (US Patent No. 6,250,890) in view of Blackshear et al. (US Patent No. 3,667,069 – hereafter Blackshear). The Examiner used exactly the same rationale for this rejection as was used in the previous Office Action dated March 9, 2006. The applicant respectfully disagrees with this contention of obviousness for the following reasons.

Summarizing the remarks presented in section 1 above, **in claim 1** of the subject application the **applicant claims that the radius of the inner tubular cylinder of the nozzle regulator automatically decreases when a fluid within the cylinder experiences a backpressure, and when the backpressure is removed the radius automatically increases back to its original size.**

Summarizing the remarks presented in section 3 above, **in claim 9** of the subject application the **applicant claims an automatically deformable nozzle regulator which is constructed of a deformable material.** In other words, the *entire* nozzle regulator is constructed of a deformable material, including *both* the outer and inner cylinders.

Summarizing the remarks presented in section 5 above, **in claim 15** of the subject application the **applicant claims** an outlet side regulated venturi pump which includes, at its outlet side, **an automatically deformable nozzle regulator that automatically adjusts its output area** to further decrease the pressure inside the pump.

Summarizing the remarks presented in section 4 above, **in claim 20** of the subject application the **applicant claims** a method for *automatically* adjusting the output area of a deformable nozzle regulator in which a **backpressure in the fluid that flows from the inlet side to the outlet side of the regulator causes** an output nozzle on the regulator to automatically constrict, resulting in **an automatic reduction in the output area of the nozzle.** The applicant further claims that a **subsequent decrease in the backpressure allows the output area of the nozzle to automatically return to its original size.**

In contrast, reiterating what was previously stated in the applicant's Office Action response dated June 9, 2006, Popov teaches a liquid-gas jet apparatus for evacuation/discharge of vapor-gas mediums. Popov further teaches that the jet apparatus generally pertains to the field of vacuum jet technology applied in various industrial processes (refer to column 1, lines 3-6), and more specifically can be applied "especially in the petrochemical industry for vacuum refinement of an oil stock in rectifying vacuum columns." (refer to column 3, lines 38-41) Popov yet further teaches that "the technical problem to be solved by this invention is an increase of reliability of a liquid-gas jet

apparatus by provision of a more steady flow of an ejecting liquid medium and reduction of energy losses during interaction of the ejecting medium with an evacuated (passive) medium." (refer to column 1, lines 33-38) More particularly, Popov teaches an apparatus made up of a "nozzle for feed of an ejecting liquid medium and a mixing chamber" which "includes a collection of shaped channels" where "the collection of channels comprises a central channel placed in alignment to the mixing chamber and a number of peripheral channels uniformly allocated around the central channel" (refer to column 1, lines 40-45), and where an ejecting liquid medium flows into and through the nozzle and entrains a gaseous or vapor-gaseous evacuated medium into the mixing chamber, resulting in the formation of a gas-liquid medium which passes out of the mixing chamber (refer to column 3, lines 27-34). **Nowhere does Popov teach that any part of the apparatus is deformable or ever changes any of its dimensions while in operation (under any condition – be it automatic or controlled), or that any part of the apparatus is constructed of a deformable material.**

In further contrast, reiterating what was also previously stated in the applicant's Office Action response dated June 9, 2006, Blackshear teaches an implantable cardiac/heart pump device for replacing or assisting a disabled right heart. (refer to Abstract) More particularly, Blackshear teaches "an implantable jet pump cardiac ... right ventricle replacement device" that works "in conjunction with left ventricle support yielding total heart support." (refer to column 1, lines 8-11) Granted, Blackshear does teach a venturi-type pumping device in which "the pressure source for the driving fluid of the jet pump is the left heart." (refer to column 2, lines 40-41) However, **Blackshear teaches that "the device is made of substantially rigid, substantially non-flexing material"** (refer to column 4, lines 46-47) **"which [is] capable of maintaining the shape and alignment of the parts ..."** (refer to column 5, lines 34-36) **Nowhere does Blackshear teach that any part of the device is deformable or ever changes any of its dimensions while in operation (under any condition – be it automatic or controlled), or that any part of the device is constructed of a deformable material.** This is further reinforced by the Blackshear teachings previously cited on page 14 of the aforementioned Office Action response dated June 9, 2006, which in summary teach that there is *no* automatic

deformation of the driving nozzle or related automatic control of the flow rate of the fluid that flows through the nozzle.

Thus, neither Popov, nor Blackshear, nor the combination of Popov and Blackshear teaches the subject application's claimed feature of an automatically deformable nozzle regulator which contains an inner tubular cylinder whose radius automatically decreases (causing an automatic reduction in the nozzle's output area) when a fluid flowing within the cylinder experiences a backpressure, and whose radius automatically increases back to its original size (allowing the nozzle's output area to automatically return to its original size) when the backpressure is subsequently removed, or the feature of the entire nozzle regulator being constructed of a deformable material. Furthermore, neither Popov, nor Blackshear, nor the combination of Popov and Blackshear appreciates the advantages of these features which are discussed in section 1 above. Accordingly, no prima facie case of obviousness has been established in accordance with the holding of *In Re Fine*. This lack of prima facie showing of obviousness means that rejected claims 1-20 are patentable under 35 USC 103(a) over Popov in view of Blackshear. Accordingly, it is respectfully requested that these claims be reconsidered based on the following exemplary non-obvious language:

In claim 1: "an inner tubular cylinder having a second radius that is less than the first radius, wherein the outer tubular cylinder and the inner tubular cylinder are concentric about a longitudinal direction, and wherein the inner tubular cylinder is made of a deformable material such that when a fluid within the inner tubular cylinder experiences a backpressure, the second radius automatically decreases, but when the backpressure is removed the second radius automatically increases back to its original dimension;"

In claim 9: "An automatically deformable nozzle regulator, comprising:  
wherein the automatically deformable nozzle regulator is constructed of a deformable material."

In claim 20: "A method for automatically adjusting an output area of a deformable nozzle regulator having an inlet side and an outlet side such that fluid flows through the deformable nozzle regulator from the inlet side to the outlet side and exits at an output nozzle, comprising:  
generating a backpressure of the fluid at the deformable nozzle regulator;

constricting the output nozzle using the backpressure to reduce an output area of the output nozzle; and  
decreasing the backpressure to allow the output area to return to its original size."

Additionally, the applicant asserts that a prima facie case of obviousness can not be established because **Popov and Blackshear are non-analogous art**, both compared to each other and compared to the subject application. MPEP (Eighth Edition, Latest Revision October 2005) §2141.01(a) states:

"In order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned." *In re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992)."

"A reference is reasonably pertinent if, even though it may be in a different field from that of the inventor's endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem." *In re Clay*, 966 F.2d 656, 659, 23 USPQ2d 1058, 1060-61 (Fed. Cir. 1992)"

"where the general scope of a reference is outside the pertinent field of endeavor, the reference may be considered analogous art if subject matter disclosed therein is relevant to the particular problem with which the inventor is involved. *State Contracting & Eng'g Corp. v. Condotte America, Inc.*, 346 F.3d 1057, 1069, 68 USPQ2d 1481, 1490 (Fed. Cir. 2003)"

The subject application resides in the field of nozzle regulators for use in venturi pumps for pumping an assortment of fluids in industrial, commercial and home applications. The subject application solves problems with existing venturi pumps such as their inability to continue to pump when the fluid level at the outlet of the pump reaches a certain height, and reduced pump performance due to debris or other contaminants blocking the secondary inlet, or rigid foreign objects in the fluid being pumped getting lodged in the outlet nozzle – which could completely shut down the pump. (refer for example to published subject application paragraphs [0001, 0002 and 0007]) In contrast, as discussed in detail above, both Popov and Blackshear reside in very different fields of technology and application, and solve very different types of

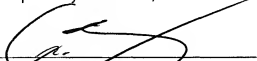
problems as compared to the subject application. More particularly, Popov resides in the field of vacuum jet technology for evacuating vapor-gas mediums in various industrial processes, especially in the petrochemical industry. Blackshear resides in the medical industry, and more particularly in the field of implantable cardiac/heart pump technology for replacing or assisting a disabled right heart. As such, the applicant asserts that **neither Popov nor Blackshear are relevant to the aforementioned problems that the subject application is concerned with, nor would Popov or Blackshear have commended themselves to the attention of an inventor seeking to solve said problems.**

## 7. Summary

For the reasons set forth above, the applicant believes that rejected claims 1-20 of the subject application are in condition for allowance. Reconsideration of the rejection of these claims is respectfully requested and allowance of these claims at an early date is courteously solicited.

In an effort to expedite and further the prosecution of the subject application, the applicant kindly invites the Examiner to telephone the applicant's attorney at (805) 278-8855 if the Examiner has any comments, questions or concerns, wishes to discuss any aspect of the prosecution of this application, or desires any degree of clarification of this response.

Respectfully submitted,



Craig S. Fischer  
Reg. No. 42,535  
Attorney for applicant

LYON & HARR, LLP  
300 Esplanade Drive, Suite 800  
Oxnard, CA 93036  
(805) 278-8855